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Evaluating Agentic Female Job Candidates: The Effects of Gender and Qualification of Comparison Candidates

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**Evaluating Agentic Female Job Candidates:
The Effects of Gender and Qualification of Comparison Candidates**

A Thesis

Presented to the Department of Psychology

College of Liberal Arts and Sciences

and

The Honors Program

of

Butler University

In Partial Fulfillment

of the Requirements for Graduation Honors

Sara Grace Kern

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Abstract

Previous research has demonstrated that agentic women experience backlash in the hiring process when being considered for leadership positions. For example, Rudman et al. (2012) found that when participants evaluated an agentic female target candidate on measures of competence, likability, and hirability, although the female candidate received equal ratings of competence to an agentic male candidate, she received backlash in the form of lower ratings of likability and hirability than the agentic male candidate. In the current study, I investigated whether these backlash effects are consistent when the agentic female target candidate is evaluated in comparison to a male or female competitor of equal or lesser qualifications. Participants were randomly assigned to one of four conditions in which they received and read information about an agentic female target candidate and a competitor candidate (male/equally qualified, female/equally qualified, male/less qualified, female/less qualified) applying for a faculty position at Butler University. Participants then evaluated the target candidate on measures of competence, likability, and hirability. Results suggests that qualification of the comparison candidate influenced evaluations of the target candidate such that a less qualified comparison candidate improved ratings of the target candidate's competence, likability, and hirability. Contrary to predictions, significant effects of gender of comparison candidate were not found. This suggests that backlash effects related to candidate gender may not be as prominent in hiring situations that involve direct comparison to competitors.

Evaluating Agentic Female Job Candidates:

The Effects of Gender and Qualification of Comparison Candidates

Gender is a defining aspect of how individuals perceive others. Research has demonstrated that people believe that men and women have and express specific traits based on their gender. Unfortunately, these gendered expectations can result in negative consequences for women. In a classic study by Broverman, Vogel, Broverman, Clarkson, and Rosenkrantz (1972), characteristics ascribed to men were shown to be more positively valued than characteristics ascribed to women. In this study, when college students were asked to identify traits that they considered typical of either men or women, they clustered male traits around competence, rationality, and assertion. In contrast, female traits clustered around warmth and expressiveness. Next, when rating the value of these traits in society, participants rated male traits as more valuable than female traits. And, although these masculine traits were evaluated as more desirable, they were shown to be considered more valuable in men than in women. This pattern of results leaves women no means of being considered equal to men: women opting to adopt valued male traits are at risk for becoming female failures.

The stereotypical traits used in Broverman et al.'s (1972) classic research mirror male and female *prescriptive* and *proscriptive* traits found in more recent research (Rudman, Moss-Racusin, Phelan & Nauts, 2012). *Prescriptive traits* are considered to be typical, expected, and acceptable (i.e., what a male or female person is *supposed* to be like); whereas *proscriptive traits* are considered atypical, unexpected, and unacceptable (i.e., what a male or female person is *not* supposed to be like). Participants rated a variety of traits based on their desirability (prescriptive or proscriptive) and typicality in men and

women as well as the status of each trait. Results demonstrated male prescriptions were traits that strongly reflected *agency* (e.g., assertive, independent, ambitious). Female prescriptions strongly reflected *communality* (e.g., sensitive to others, cooperative, supportive). Male prescriptions (e.g., career oriented, leadership ability, business sense) were all considered high status traits, whereas female prescriptions were a mix of high status traits (e.g., enthusiastic) and low status traits (e.g., emotional). Male proscriptions were traits reflecting vulnerability, which were considered low status (e.g., insecure, indecisive, emotional), whereas female proscriptions were dominance traits, which were considered high status (e.g., aggressive, intimidating, controlling). In summary, just like the earlier work from the 1970's, recent research demonstrated that women are not believed to have agentic traits, although these traits are highly valued in society and are associated with status. Men are believed to be more likely to possess these agentic traits that are considered atypical for women.

Agency is the inclination to be independent, industrious, and assertive. As the aforementioned *prescriptions* and *proscriptions* demonstrate, agentic traits are generally associated with men. However, women seeking status in the workforce often manifest these traits because they are necessary for positive evaluations in high status positions. I will refer to women who seek status in the workforce and who manifest agentic traits as *agentic women*. Although taking on male characteristics to attain status and value seems like a viable strategy for women, in doing so, such women are at risk for backlash, which Rudman et al. define as “social and economic penalties for behaving counter stereotypically” (p. 165, 2012). These penalties take place in the form of negative

evaluations for women's deviance from gender norms (i.e., exhibiting agency when it is a proscription for women).

Rudman and Fairchild (2004) demonstrated that when someone is perceived as deviant from his or her gender norm, the person is more likely to be subject to backlash for his or her behavior. In their study, participants believed themselves to have lost a game to either a gender-deviant or gender-normative opponent. Participants were then given the opportunity to sabotage their opponent. The overall results demonstrated that participants were more likely to sabotage gender-deviant opponents. This effect was only marginally significant when the opponent was male (participants were marginally more likely to sabotage a gender-deviant male than a gender-normative male). However, participants sabotaged gender-deviant female opponents significantly more than gender-normative female opponents. This result demonstrates that agentic women are at unique risk for backlash relative to communal men.

In a second experiment by the same authors, participants were made to feel as though they, themselves, were gender-deviant or gender-normative. Experimenters made participants perceive themselves as gender-deviant by leading female participants to believe they did well on a test of masculine knowledge and poorly on a test of feminine knowledge, and by leading male participants to believe they did well on a test of feminine knowledge and poorly on a test of masculine knowledge. Participants in the gender-normative condition were led to believe they performed well on a test of knowledge that appropriate for individuals of their gender. When participants felt as though they had personally violated gender norms, they were more likely to fear sabotage from their opponent. This effect was present in both male and female participants in the gender-

deviant condition, and suggests that people have some degree of awareness of the backlash that exists against those who violate gender norms.

Stereotypes about men and women also influence assumptions about leadership. Generally speaking, people prefer leaders who demonstrate agency (a stereotypically masculine trait) over communality (a stereotypically feminine trait). A meta-analysis of studies pertaining to the evaluation of male versus female leaders demonstrated that there is a small overall tendency for individuals to evaluate female leaders less favorably than male leaders (Eagly, Makhijani, & Klonsky, 1992). However, this tendency to give more favorable evaluations to male leaders became more pronounced when participants were specifically evaluating the leaders' competence or the participant's own satisfaction with the leader. The tendency also became more pronounced when female leaders exhibited masculine (agentic) leadership styles as opposed to feminine (communal) leadership styles. Even in studies in which descriptions of male and female leaders were identical, male leaders were preferred. In short, females were generally less preferred in leadership roles, especially when roles and traits of leaders were considered masculine.

Preference for male leaders over female leaders has also been demonstrated through individual's reactions to feedback these leaders provide. In particular, it has been found that the evaluation of agentic women in leadership positions can be dependent upon the feedback they provide others, but this is not the case for agentic men. In a study conducted on a college campus, a sample of university students completed surveys about their grades (Sinclair & Kunda 2000). Participants indicated who their professors were, what grades they received, if they believed they deserved their grades, and their level of satisfaction with each grade. When female instructors gave students lower grades,

students were significantly less satisfied with these grades than low grades given by male professors. This in turn resulted in lower evaluations of female professors. This means that students discredit female professors who provided negative feedback. In contrast, participants were less satisfied with their own answers when the negative feedback was given from male professors. This suggests that because the female professor had been discredited, students felt her negative feedback to them was undeserved. In contrast, because male professors had not been discredited, students believed they deserved negative feedback given by male professors. A follow-up study conducted in a controlled setting replicated the findings that the evaluation of a female authority figure was drastically more dependent on the feedback that that female authority figure provided the participant than was the evaluation of a male authority figure. Both experiments support the idea that discrediting female evaluators who give negative feedback allows participants to maintain more positive self-view. It is a form of self-preservation thus using negative, incompetent female stereotypes against the female authority figures, which again demonstrates the bind women experience when in positions of leadership.

The preference for male leaders over female leaders has been shown to influence the hiring process. It results in sex-based discrimination because male candidates are preferred over female candidates in the hiring process for high-status leadership positions. In a study in which business professionals evaluated individuals' resumes for possible interviews, men were more likely to receive interviews for a high ranking, stereotypically masculine job (Glick, Zion, & Nelson, 1988). In this study, participants, who were upper level managers and business professionals, received a cover letter, resume, and questionnaire asking if the applicant should receive an interview for an open

position. Participants' responses indicated that female applicants should more likely be interviewed for the lower status, stereotypically feminine jobs whereas male applicants should more likely be interviewed for higher status, typically masculine jobs. Even when female applicants had masculine characteristics, their potential chance of interview did not increase enough to match that of men for the high ranking positions. Female applicants were at a clear disadvantage in the hiring process for high status jobs.

Heilman's (1983) *Lack of Fit Model* aims to explain the previously described phenomenon in which women are considered less desirable for high-ranking leadership positions. This model states that people combine their perceptions of an individual's traits and their perceptions of the requirements for a position to determine how well they believe that individual to fit in said position. This in turn influences the expectations of the individual's performance in the position. If perceived attributes don't match perceived job requirements, the individual is considered to be a poor fit and is expected to fail. Therefore, the model explains sex-based discrimination in the hiring process such that women are viewed as unsuitable leaders because their expected communal traits don't match those required in a stereotypical leadership roles. Women are perceived to be communal rather than agentic, so they are expected to fail in leadership positions requiring agentic traits.

Eagly and Karau's (2002) *Role Congruity Theory* elaborates on the *Lack of Fit Model*. The theory states that if social perceivers have stereotypes about a certain group that are incongruent with the attributes they believe are required for success in a certain social role, then when a member of said group takes on an incongruent social role, it lowers evaluations of this group member. Beyond that, predictions of the group

member's success in the incongruent role are perceived to be low. This can lead to two types of discrimination. For women entering masculine leadership roles, they are subject to less favorable evaluation in comparison to a parallel man, and second, their behavior in said role is viewed as less favorable than equivalent behavior of men. Therefore, the fact that they are not a stereotypical fit in itself disadvantages them regardless of their traits and performance in the position.

Previous studies regarding leadership have indicated three key characteristics of the way individuals evaluate potential leaders: competence (possessing required skills, knowledge, and qualification for a position), likability (the quality of being found pleasant and agreeable by others), and hirability (the degree to which one is considered a good fit for a position). When evaluating job candidates specifically on competence, likability, and hirability, gendered traits and behaviors also have an effect. For example, just as agentic traits are associated with status and can result in general backlash, they also appear to be associated with discrimination in the hiring process. Rudman and Glick (1999) assessed backlash against agentic females in the hiring process. Participants viewed videotapes of agentic and communal job applicants. The job was either described to participants as requiring masculine traits (leadership, agency), or the job was "feminized" (requiring communal traits). Then, participants evaluated the competence, likability, and hirability of applicants. Agentic female job applicants were rated as equally competent to agentic male candidates (with all agentic candidates being rated as more competent than communal applicants). However, the agentic male candidate received higher social skills rating (a measure of likability) than the agentic female candidate. Low social skills ratings for agentic females caused them to be considered less

hirable than agentic males who were considered hirable for all leadership roles, “feminized” or not. In summary, this study demonstrates that a woman can be communal and liked, or can be agentic and disliked, which creates problems for women seeking leadership positions that require agency.

To explain backlash against agentic women, Rudman, Moss-Racusin, Phelan, and Nauts (2012) propose the *Status Incongruity Hypothesis* (SIH), which states that in order to maintain the gender hierarchy (the societal structure in which men are viewed as superior and more deserving of power and dominance than women), agentic women are punished for status violations. The previous research relates to this hypothesis in that the backlash experienced by agentic female leaders could be motivated by the need to maintain this gender hierarchy. In one study, participants read recommendation letters for candidates eligible for promotion to English Professor at Yale. Candidates were portrayed as being either agentic or communal. When candidates were portrayed as agentic, the female candidate was rated as less likable and hirable for the position than the male candidate. Also, the agentic female was perceived as more dominant than the agentic male. Because dominance is a proscription for women, agentic female candidates were penalized for possessing dominance traits through lower likability ratings. This study supports the SIH in that backlash is dependent upon status violation. A follow-up study, in which confederates posed as and were evaluated as live job candidates also demonstrated parallel backlash against agentic female candidates. Although confederates posing as agentic women were viewed as equally competent to confederates posing as agentic men, participants rated them as lower on likability and hirability. Furthermore, participants who were more likely to endorse the gender status quo rated agentic female

targets as significantly more dominant and less hireable and likable than agentic men. In sum, although influences on competence ratings are unclear, agentic women are punished for their status violations through reduced perceptions of likability and hireability. This, in turn, stifles their chances of receiving high status positions in the workforce.

In summary, although agentic traits are highly valued, especially in leadership positions, women who manifest these traits receive backlash because they are seen as deviant from gender stereotypes. They are characterized as less likable and less hireable than agentic men even when they are equally qualified to those men. One thing to note about the methodology used in past research is that *in each of the previous studies, the target person was always evaluated in isolation*. For example, some participants evaluated an agentic woman while other participants evaluated an agentic man; and the two sets of ratings were compared. In real hiring situations, candidates are not evaluated in isolation, but rather are compared against other candidates to determine the most qualified individual for the job. My research aimed to see if these backlash effects against agentic female job candidates are still present when an agentic female candidate is compared side-by-side with another candidate. Furthermore, my research aimed to investigate if these backlash effects are still present in the act of comparing candidates in the hiring process, even when one candidate is obviously more qualified for the position. Thus, my research question is as follows: If an individual is more qualified than the competitor, does gender still matter in the hiring process?

Thesis Description and Methods

Thesis Description

The Status Incongruity Hypothesis (SIH) proposed by Rudman et al. (2012) states that in order to maintain the gender hierarchy, agentic women are punished for status violations through lower evaluations of hirability and likability. My research aimed to investigate whether these backlash effects are consistent when an agentic female target candidate is evaluated in comparison to a male or female competitor of equal or lesser qualifications.

Participants

The participants for this study were 80 undergraduate students enrolled at Butler University. Of the participants, 78.8% were female, 20% were male, and 1.2% identified as neither male nor female. Participants were between 18 and 22 years of age, with a mean age of 19.8. Of the 80 participants, 75 identified as European American.

Procedure and Materials

Recruitment of Participants. Participants were recruited in one of three manners: (1) 41 participants were recruited from an online system in which students enrolled in an introductory psychology course could receive extra credit for their participation; (2) Surveys were distributed at a table in a university common space, and 17 participants received candy in exchange for their participation; and (3) A convenience sample of 22 acquaintances of the experimenter were asked if they would like to participate in a psychology study.

Overview. The procedure required participants to read two information sheets, each describing a job candidate for a professor position. One sheet addressed the study's

target candidate (an agentic female candidate); the other addressed a *competitor candidate* (an equally or lesser qualified male or female candidate). Then participants completed a questionnaire to determine if the evaluation of the *target candidate* was influenced by the gender and qualification of the competitor candidate.

Detailed Procedure. First, I obtained informed consent from all participants (Appendix A). Then, participants were told they would be reading information about two candidates for a faculty position at Butler University. Then, each participant was given a protocol to complete containing two applicant information sheets for a professor position in the history department. One of these information sheets was for the *target candidate* in the study: an agentic female candidate (Appendix B). To ensure the candidate was perceived to be agentic, the information sheet mentioned her assertiveness, competitiveness, and ability to make individual decisions. The other information sheet was for the *competitor candidate*, who varied across the four experimental conditions. The first independent variable was the gender of the competitor candidate (male or female). The second independent variable was the qualification of the competitor candidate. There were two levels of this variable. The first was *equally qualified* to the target candidate, in which the competitor candidate's information sheet contained equally positive information to that of the target candidate (e.g. parallel work experience, publications, degree earned at an equally prestigious university). The second level of qualification variable was *less qualified*. Competitor candidates in this condition had less impressive information sheets compared to the target candidate (e.g., less work experience, degree earned at a less prestigious university). Therefore, the four comparison candidates were: equally qualified man (Appendix C), equally qualified

woman (Appendix D), less qualified man (Appendix E), and less qualified female (Appendix F). Regardless of experimental condition, the information sheet for the competitor candidate included no mention of agentic (or communal) traits.

Design. This study therefore incorporated a 2 x 2 experimental design in which the first independent variable was the gender of the competitor candidate (male or female) and the second independent variable was the qualification of the competitor candidate (equal to or lesser than the target).

Dependent Measures. After reading the two letters of recommendation, all participants filled out a questionnaire rating the competency, likability, and hirability of the target agentic female candidate (Appendix G). The questionnaire was comprised of 20 items evaluating competence (7 items; e.g., *this applicant would be a competent history instructor*), likability (6 items; e.g., *the applicant seems like someone I would be willing to get to know better*), hirability (5 items; e.g., *this applicant is someone I would suggest be hired for an associate professor at Butler University*), and agency (2 items; e.g., *this applicant seems like a strong leader*) of the target candidate. Each item was scored on a scale of agreement ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). When questionnaires were completed, participants were debriefed (Appendix H), thanked, and dismissed.

Hypotheses

In regards to the dependent measures of likability and hirability, when collapsing across qualification, I predicted a main effect of the gender of the competitor: that the target candidate would be evaluated less favorably when compared to a male competitor than a female competitor. When collapsing across gender, I predicted a main effect of the

qualifications of the competitor: the target candidate would be evaluated more favorably when compared to a less qualified competitor than an equally qualified competitor.

Finally, I predicted an interaction between the two independent variables: When compared to an equally qualified competitor, I predicted the target candidate would be evaluated less favorably when this competitor was male as opposed to female, a hypothesis consistent with previous research (Rudman & Glick, 1999; Rudman et al., 2012). However, when compared to a less qualified competitor, I predicted the gender of this competitor would not significantly influence the evaluation of the target candidate because preference for a more qualified individual filling the position would override preference for a male.

However, for the dependent variable of competence, I predicted that there would only be a main effect of qualification such that, when collapsing across gender, the target candidate would be rated as more competent when compared to a less qualified competitor than when compared to an equally qualified competitor. Past research has not demonstrated clear results of backlash in terms of competence ratings for agentic females (Rudman & Glick, 1999; Rudman et al., 2012), so I did not predict any interaction effects for this dependent measure.

Results

Scale Development

After reverse coding appropriate items, scales were built for measures of competence, likability, hirability, and agency by taking the mean of all items corresponding to each of the four constructs. Then, the internal reliability of each scale was measured. To measure target candidate competence, items 1-7 were combined into

one scale. This scale was found to be internally reliable (Cronbach's $\alpha = .80$). To measure target candidate likability, items 8-13 were combined into one scale. This scale was found to be internally reliable (Cronbach's $\alpha = .78$). To measure target candidate hirability, items 14-18 were combined into one scale. This scale was found to be internally reliable (Cronbach's $\alpha = .87$). To measure target candidate agency, items 19 and 20 were combined. This scale was found to be internally reliable (Cronbach's $\alpha = .82$).

Analysis Strategy

All dependent measures were submitted to a 2 (comparison candidate gender: male vs. female) x 2 (comparison candidate qualification: equally qualified to target candidate vs. less qualified than target candidate) between subjects ANOVA.

Competence

For ratings of target candidate competence, there was only a main effect of comparison candidate qualification, $F(1,79) = 9.53, p < .01$. Participants who compared the target candidate to a less qualified candidate rated the target candidate higher on competence ($M = 5.95$) than participants who compared the target candidate to an equally qualified candidate ($M = 5.53$).

Likability

For ratings of likability, there was only a main effect of comparison candidate qualification, $F(1,79) = 5.05, p < .05$. Participants who compared the target candidate to a less qualified comparison candidate rated the target significantly higher on measures of likability ($M = 4.94$) than participants who compared the target to an equally qualified comparison candidate ($M = 4.57$).

Hirability

For ratings of hirability, there was only a main effect of comparison candidate qualification, $F(1,79) = 9.75, p < .01$. Participants who compared the target candidate to a less qualified comparison candidate rated the target as significantly more hireable ($M = 5.56$) than participants who compared the target to an equally qualified candidate ($M = 4.61$).

Agency

No statistically significant effect was found for agency ratings of the target candidate.

Discussion

Past research has demonstrated that, although agentic women are perceived to be equally competent to agentic men, they receive backlash in the hiring process such that they are perceived as less likable and thus less hireable than agentic men (Rudman et al., 2012). This puts agentic women at a disadvantage in the hiring process, especially for leadership positions stereotypically held by men. In contrast to this body of past research in which job candidates were evaluated in isolation, my study aimed to test if these backlash effects would be present in a more realistic hiring scenario in which an agentic female candidate was evaluated alongside a comparison job candidate. In this study, participants read two information sheets, one describing an agentic female target candidate and one describing a comparison candidate. The comparison candidates varied on both gender and qualification. Then, participants evaluated the target candidate on measures of competence, likability, and hirability.

Assessment of Hypotheses

For the dependent variable of competence, I predicted only a significant main effect of qualification such that target candidate would receive a more favorable evaluation when compared to a less qualified comparison candidate. I predicted no main effect of gender and no interaction effect. Results supported my prediction in that participants rated the target candidate as significantly more competent when compared to a less qualified comparison candidate versus an equally qualified comparison candidate. Also in line with my predictions, no main effect of gender nor an interaction effect was found.

For the dependent variable of likability, I predicted a main effect of gender such that participants would evaluate the target candidate as more likable when compared to a female comparison candidate. I predicted a main effect of qualification such that participants would evaluate the target candidate as more likable when compared to a less qualified comparison candidate. Finally, I predicted an interaction effect such that when compared to an equally qualified comparison candidate, the target candidate would be evaluated as less likable when the comparison candidate was male as opposed to female. However, when compared to a less qualified comparison candidate, I predicted the gender of this comparison candidate would not significantly influence the evaluation of the target candidate. The results only demonstrated the predicted main effect of qualification: participants evaluated the target candidate as being more likable when judged against a less qualified comparison candidate. There was no effect of gender of the comparison candidate and no interaction effect.

My hypotheses for the dependent measure of hirability mirrored those of the dependent variable of likability. Again, the results supported only the predicted main effect of qualification: participants evaluated the target candidate as being more hireable when judged against a less qualified comparison candidate. Once again, there was no effect of gender of the comparison candidate and no interaction effect.

Overall, the results of this study did not demonstrate the same backlash effects against agentic female job candidates that have been present in previous research (e.g., Rudman et al., 2012). Comparison candidate qualification was the only independent variable shown to influence participants' perceptions of the target candidate's competence, likability, and hirability. These results may suggest that individuals pay less attention to the gender of job candidates when their attention is focused on the direct comparison of one candidate to another candidate. When a candidate is evaluated in isolation, there is no overt standard on which individuals can base their evaluations of the candidate, potentially causing them to revert to their gender biases and stereotypes as the standard on which to base evaluations. When another candidate is present, as was the case in this study, the comparison candidate becomes the standard on which evaluations of the target candidate are based, making it less necessary for individuals to revert to gender stereotypes as a basis of evaluations, thus reducing backlash effects. In contrast to gender, qualification is a legitimate factor in determining which candidate is best when multiple candidates are present. As a result, a less qualified comparison candidate may cause a target candidate to receive more favorable evaluations, regardless of the gender of the two candidates.

These results could also suggest that there is a methodological error with the way in which researchers have been studying backlash against agentic women in the hiring process. Different methods of data collection could potentially detect backlash that is not being detected through current, popular methods of data collection in this field.

Limitations

One potential limitation of this study was the information sheets conveying information about both the target candidate and the comparison candidates. It is possible that the information presented caused the target candidate to be perceived by participants as so objectively better than the comparison candidate that no effect of gender could have reasonably occurred. Furthermore, the gender of both the target candidate and the comparison candidate were only briefly conveyed to the participants through the candidates' names written at the top of each information sheet. It is possible that participants skimmed over this information without actually attending to it.

Beyond the study materials, the participant sample could also be a limitation of this study. Participant recruitment was inconsistent, with over a quarter of participants recruited by a convenience sample rather than through the participant pool. Furthermore, only 20 participants were recruited per condition of the study, and the gender distribution was heavily skewed towards female participants, making it impossible to analyze whether the gender of the participant had any impact on the results. Also, participants' areas of study at the university were not recorded. Area of study could have had an effect as students taking classes in the history department could potentially care more about the quality of a newly hired history professor and therefore could have taken the experimental task more seriously than other participants.

Future Directions

Future research may attempt to replicate these findings, in which target candidates are evaluated in comparison to other candidates, in a more realistic hiring setting (e.g., show participants videos of candidates or have confederates pose as candidates). Also, it could be useful to add a control condition in which participants evaluate the target candidate in isolation in addition to comparing the target candidate to comparison candidates. Beyond this, future research may wish to explore specific factors on which individuals base their candidate evaluations of competence, likability, and hirability in both isolated evaluation and evaluation with a comparison candidate. Are individuals more likely to base candidate evaluations on gender stereotypes when no comparison candidate is present? Or is there another factor that is contributing to differences in backlash effects in isolated evaluation versus evaluation with comparison?

If research continues to show backlash effects to be less present for agentic females in hiring situations in which they are compared to other candidates, it could be useful to explore if any backlash effects exist for non-agentic women in hiring situations with comparison candidates because these non-agentic women do not hold stereotypical leadership traits. Furthermore, future research should also investigate if and how other identity characteristics (i.e., race, socioeconomic status, sexual identity) influence backlash against agentic female job candidates.

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Appendix A

Statement of Informed Consent*Student Evaluation of Candidates for Faculty Positions*

The Psychology Department and Butler University require that all persons who participate in psychological research projects give their written consent to do so. Today you are being asked to participate in a research project. This consent form will provide you with brief explanations of the tasks you will complete in today's session. In signing this form, you are indicating that you understand what will happen and that you are willing to participate.

The goal of this research project is to understand how students perceive candidates for faculty positions at universities. You will be asked to read evaluations of two job candidates for a faculty position. You will then be asked to fill out a 20-item questionnaire evaluating one of these applicants. This session will take approximately 20 minutes.

The data collected in this session will be completely anonymous. All data collected will be stored separately from this consent form, and there is no way to connect your name to your responses. Extra credit may be earned in some classes by participating in this study.

If you have any further questions about this study, please ask the experimenter prior to signing the consent form. If you have any questions, please contact Sara Kern (the researcher) via email (sgkern@butler.edu). If you would also like to contact the faculty advisor for this study, please email Dr. Kathryn Morris at kmorris@butler.edu. If you are willing to participate, please read the statement below and complete the bottom portion of the consent form. Thank you.


I have read the above description of today's experimental session, and I agree to participate. I understand that participation in this session is **completely voluntary** and that I am free to choose not to participate. I further understand that I may withdraw at any time without penalty, even during the experimental session.

Printed name: _____

Signature: _____

Date: _____

Appendix B

 **Butler University Faculty Application
Reference Letter Cover Sheet**

To be completed by applicant:

Name: Dr. Laura Anderson Date: 9/12/2013

Position of Interest: Associate Professor of History

Undergraduate Degree(s): Bachelor of Arts in History and Political Science

Undergraduate University: Marquette University

Graduate Degree(s): Ph.D in History

Graduate University: Ohio State University

Teaching Experience (position, institution, length of employment):
7 years as Associate Professor of History at St. Louis University.

Number of Publications:
Level A Publications (top journal in field): 3 Level B Publication (second tier journal in field): 1
Level C Publication (non-competitive journal review process): 2

To be completed by professional reference:

Name: Dr. Casey Fredrick

Current Employment: Chair of St. Louis University's History Department

Relation to Applicant: Both supervisor and colleague

Below, please list 3 traits of the applicant that will most positively influence his/her performance as a Butler faculty member.


competitive, career-driven, independent

In one sentence, please describe how the applicant would positively contribute to the Butler University team.

Never hesitating to take charge, Dr. Anderson is a competent scholar capable of individual decisions, making her an excellent member of any staff.

Please attach your personal letter of reference for the applicant to the back of this sheet.

Appendix C

 **Butler University Faculty Application
Reference Letter Cover Sheet**

To be completed by applicant:

Name: Patrick Miller, Ph.D. Date: Sept 13, 2013

Position of Interest: Associated Professor of History

Undergraduate Degree(s): Bachelors of Arts in both History & Anthropology

Undergraduate University: Loyola University Chicago

Graduate Degree(s): Ph.D. in History

Graduate University: University of Illinois

Teaching Experience (position, institution, length of employment):
Associate Professor of History, Xavier University, 7 years

Number of Publications:
Level A Publications (top journal in field): 3 Level B Publication (second tier journal in field): 1
Level C Publication (non-competitive journal review process): 2

To be completed by professional reference:

Name: Dr. Alex Martin

Current Employment: Head of History Department, Xavier University

Relation to Applicant: Colleague and supervisor for 7 years

Below, please list 3 traits of the applicant that will most positively influence his/her performance as a Butler faculty member.

Organized, efficient, committed

In one sentence, please describe how the applicant would positively contribute to the Butler University team.

Dr. Miller's professional demeanor and proficient knowledge of world History would make him a positive addition to the Butler History faculty.

Please attach your personal letter of reference for the applicant to the back of this sheet.

Appendix D



Butler University Faculty Application Reference Letter Cover Sheet

To be completed by applicant:

Name: Patricia Miller, Ph.D. Date: Sept. 13, 2013
 Position of Interest: Associate Professor of History
 Undergraduate Degree(s): Bachelor of Arts in both History & Anthropology
 Undergraduate University: Loyola University Chicago
 Graduate Degree(s): Ph.D. in History
 Graduate University: University of Illinois

Teaching Experience (position, institution, length of employment):

Associate Professor of History, Xavier University, 7 years

Number of Publications:

Level A Publications (top journal in field): 3 Level B Publication (second tier journal in field): 7

Level C Publication (non-competitive journal review process): 2

To be completed by professional reference:

Name: Dr. Alex Martin
 Current Employment: Head of History Department, Xavier University
 Relation to Applicant: Colleague and supervisor for 7 years

Below, please list 3 traits of the applicant that will most positively influence his/her performance as a Butler faculty member.


Organized, efficient, committed

In one sentence, please describe how the applicant would positively contribute to the Butler University team.

Dr. Miller's professional demeanor and proficient knowledge of World History would make her a positive addition to the Butler History faculty.

Please attach your personal letter of reference for the applicant to the back of this sheet.

Appendix E

 **Butler University Faculty Application
Reference Letter Cover Sheet**

To be completed by applicant:

Name: Patrick Miller, Ph.D. Date: Sept. 13, 2013

Position of Interest: Associate Professor of History

Undergraduate Degree(s): Bachelor of Arts in History

Undergraduate University: Franklin College

Graduate Degree(s): Ph.D. in History

Graduate University: Ball State University

Teaching Experience (position, institution, length of employment):
Adjunct Professor of History, Xavier University
2 years

Number of Publications:

Level A Publications (top journal in field): 0 Level B Publication (second tier journal in field): 1

Level C Publication (non-competitive journal review process): 1

To be completed by professional reference:

Name: Dr. Alex Martin

Current Employment: Head of History Department, Xavier University

Relation to Applicant: Colleague and Supervisor for 2 years

Below, please list 3 traits of the applicant that will most positively influence his/her performance as a Butler faculty member.

Friendly, helpful, hard worker

In one sentence, please describe how the applicant would positively contribute to the Butler University team.

Because Dr. Miller is an adjunct, our interactions are limited. However, he appears to be a fine candidate.

Please attach your personal letter of reference for the applicant to the back of this sheet.

Appendix F



Butler University Faculty Application Reference Letter Cover Sheet

To be completed by applicant:

Name: Patricia Miller, Ph.D Date: Sept 13, 2013

Position of Interest: Associate Professor of History

Undergraduate Degree(s): Bachelor of Arts in History

Undergraduate University: Franklin College

Graduate Degree(s): Ph.D. in History

Graduate University: Ball State University

Teaching Experience (position, institution, length of employment):

Adjunct Professor of History, Xavier University, 2

Number of Publications: 0 Level A Publications (top journal in field): 0 Level B Publication (second tier journal in field): 1

Level C Publication (non-competitive journal review process): 1

To be completed by professional reference:

Name: Dr. Alex Martin

Current Employment: Head of History Department, Xavier University

Relation to Applicant: Colleague and Supervisor for 2 years

Below, please list 3 traits of the applicant that will most positively influence his/her performance as a Butler faculty member.

Friendly, helpful, hard worker

In one sentence, please describe how the applicant would positively contribute to the Butler University team.

Because Dr. Miller is an adjunct, our interactions are limited. However, she appears to be a fine candidate.

Please attach your personal letter of reference for the applicant to the back of this sheet.

Appendix G

Please fill out the following 20 items regarding Applicant 1, Dr. Laura Anderson. Be as accurate and honest as possible.

1. To what extent is this applicant qualified for the job of Associate Professor at Butler University?

1	2	3	4	5	6	7
Unqualified			Moderately Qualified			Extremely Qualified

2. This applicant possesses adequate teaching experience to be considered for the position of Associate Professor at Butler University.

1	2	3	4	5	6	7
Strongly Disagree			Neither Agree nor Disagree			Strongly Agree

3. This applicant possesses the skills necessary to be an effective member of the Butler teaching faculty.

1	2	3	4	5	6	7
Strongly Disagree			Neither Agree nor Disagree			Strongly Agree

4. This applicant would be a competent history instructor.

1	2	3	4	5	6	7
Strongly Disagree			Neither Agree nor Disagree			Strongly Agree

5. This applicant would be a competent researcher in the field of history.

1	2	3	4	5	6	7
Strongly Disagree			Neither Agree nor Disagree			Strongly Agree

6. This applicant is an expert in his or her field.

1	2	3	4	5	6	7
Strongly Disagree			Neither Agree nor Disagree			Strongly Agree

7. This applicant could use more experience before becoming fully competent for the position.

1	2	3	4	5	6	7
Strongly Disagree			Neither Agree nor Disagree			Strongly Agree

8. This applicant is likable.

1	2	3	4	5	6	7
Strongly Disagree			Neither Agree nor Disagree			Strongly Agree

9. The applicant is someone I would like to get to know better.

1	2	3	4	5	6	7
Strongly Disagree			Neither Agree nor Disagree			Strongly Agree

10. This applicant would be popular with students.

1	2	3	4	5	6	7
Strongly Disagree			Neither Agree nor Disagree			Strongly Agree

11. Students would have difficulty developing good relationships with this applicant.

1	2	3	4	5	6	7
Strongly Disagree			Neither Agree nor Disagree			Strongly Agree

12. Students would like the applicant as an advisor.

1	2	3	4	5	6	7
Strongly Disagree			Neither Agree nor Disagree			Strongly Agree

13. The applicant seems like someone I would be willing to get to know better.

1	2	3	4	5	6	7
Strongly Disagree			Neither Agree nor Disagree			Strongly Agree

14. This applicant is someone I would suggest be hired for an associate professor at Butler.

1	2	3	4	5	6	7
Strongly Disagree			Neither Agree nor Disagree			Strongly Agree

15. I would personally promote this candidate for a position on the Butler staff.

1	2	3	4	5	6	7
Strongly Disagree			Neither Agree nor Disagree			Strongly Agree

16. I do not think this candidate should be hired for the position of Associate Professor.

1	2	3	4	5	6	7
Strongly Disagree			Neither Agree nor Disagree			Strongly Agree

17. If I had the power, I would hire this candidate to the Butler University Faculty.

1	2	3	4	5	6	7
Strongly Disagree			Neither Agree nor Disagree			Strongly Agree

18. I believe Butler should hire a different candidate over this one.

1	2	3	4	5	6	7
Strongly Disagree			Neither Agree nor Disagree			Strongly Agree

19. This applicant seems like a go-getter.

1	2	3	4	5	6	7
Strongly Disagree			Neither Agree nor Disagree			Strongly Agree

20. This applicant seems like a strong leader.

1	2	3	4	5	6	7
Strongly Disagree			Neither Agree nor Disagree			Strongly Agree

Please fill out the following personal information. This information will be used for statistical purposes only. Please answer accurately and honestly.

What year are you?

- ☐ Freshman
- ☐ Sophomore
- ☐ Junior
- ☐ Senior
- ☐ Other

Please indicate your primary racial affiliation(s) by checking all that apply.

- ☐ Caucasian/White
- ☐ African American
- ☐ Hispanic
- ☐ Asian/Pacific Islander
- ☐ Native American
- ☐ Other

Please indicate your primary gender identification.

- ☐ Male
- ☐ Female
- ☐ Other

What is your age?

_____ years

Appendix H

Debriefing Form:**Student Evaluation of Potential Faculty Applicants**

The purpose of this study is to understand how students perceive candidates for faculty positions at universities. To study this, everyone in the experiment saw an evaluation of two job candidates. The first candidate, Dr. Laura Anderson, was described as agentic (demonstrating strong leadership and decisive action) and well-qualified for the position. The other candidate varied by condition of the study. Half the participants read about a male candidate named Dr. Patrick Miller and the other half read about a female candidate named Dr. Patricia Miller. In addition, half the time this second candidate was equally qualified to the first candidate; and half the time the second candidate was less qualified than the first candidate.

Then, all participants evaluated the first candidate (Dr. Laura Anderson) in terms of her likability, competence, and hirability. My analysis will allow me to see whether ratings of the first candidate were affected by the gender and qualifications of the second candidate. In particular, I am trying to understand whether female candidates who display agentic characteristics (like the first candidate) are viewed negatively when compared to equally qualified male candidates versus lesser qualified male candidates, equally qualified but non agentic female candidates, and lesser qualified female candidates.

If you have any questions regarding this study, please ask the experimenter, or feel free to contact Sara Kern (sgkern@butler.edu) at any point in time. Thank you for your participation!